PATIENT PRACTITIONER INTERACTION:
A REVIEW OF ILLNESS REPRESENTATIONS AND PERCEIVED CONTROL

An Honors Thesis (ID 499)

by

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"He is the best physician who is the best inspirer of hope."

Samuel Taylor Coleridge

1772-1834

Today research in health-related fields is shifting in a direction that seems to be dissolving the separation between mind and body. Although different perspectives are evolving, and psychology is becoming an integral part of modern medicine, this trend serves not to argue against significant biomedical methods of disease diagnosis and treatment, but to complement existing health-care procedures and their effectiveness. Terms such as "holistic medicine" and "behavioral medicine" have appeared in medical training and practice, reflecting the acknowledgement of this trend as a significant development in patient care. Behavioral medicine has been defined as an

> "interdisciplinary field concerned with the development and integration of behavioral and biomedical science, knowledge, and techniques relevant to health and illness and the application of this knowledge and these techniques to prevention, diagnosis, treatment and rehabilitation." (Schwartz and Weiss, 1978 p.250)

As this definition indicates, the scope of this field is very broad, extending beyond research and theory to clinical applications. Increasing evidence shows that cognitive, behavioral, and environmental processes are major factors leading to better understanding of etiology, diagnosis, and treatment of disease. Few would argue that mental health is completely independent of physical health, and now it is becoming more clear that physical health is not entirely free from the complex processes of the mind.

There are several reasons for this paradigm shift. In part, it is a reaction initiated by critics of the biomedical model who state that in seeking a specific physiological cause and a specific physiological cure, the model fails to allow much of a role for non-physiological factors, especially cognitive factors, in etiology and treatment (Kendall & Turk, 1984). This indicates a disadvantage of such extensive specialization in modern medicine, as the physician often views the patient as nothing more than a conglomeration of parts, failing to take into account the entire situation. After all, the term "disease" is simply a label that describes a biological phenomena, not a real entity by itself (Bakal, 1979). It is impossible to find a specific condition independent of the person, a critical fact often overlooked by specialists in medicine.

Another cause for the increased interest in mental health and its relationship to physical health stems from what is termed the "epidemiological shift." Since the 1940's there has been an

overall drop in deaths due to communicable and infectious diseases, which is attributable to medicine's advances in medical technology. However, this has been followed by an increase in chronic, noncommunicable diseases which are currently the leading causes of death over infectious diseases. Only two infectious diseases,pneumonia and influenza, make the top ten list of killers. All the others, including coronary heart disease and hypertension, are highly associated with effects of lifestyle, interacting with environmental, behavioral, and cognitive variables. In considering the rise in incidents of cardiovascular disease, various factors are currently recognized as contributing to an increased risk, such as the Type A behavior pattern (TABP), a condition characterized by persistent ways people perceive demands, threats, or challenges and how they strive to control time, events, and other people. The TABP concept is especially significant for psychologists because it represents one of the first psychological variables to be identified as a predictor of future physical illness (Thoresen & Eagleston, 1984).

In addition to specialization and the epidemiological shift, the pressure of consumerism has forced its way into modern medicine and contributes to the change in medical thought. Today, with a great increase in the number of licensed physicians, the patient has a choice. Although most individual patients do not shop for better prices, large buyers of medical services like medicare and corporations have started comparing

prices, pushing doctors directly into the problems of market forces. More important than money comparisons, however, is the fact that individuals can now shop for the "right" physician, one who will deal with them as a significant person and spend the time it takes to really help. Especially in certain areas of medicine not involving acute conditions, "indications are that shopping by individuals is on the rise" (Easterbrook, 1987). Complaints about cold, uncaring physicians are prevalent and almost concomitant with modern medicine, as practitioners now use tools of technology rather than interpersonal skills, and society emphasizes the "science" of medicine rather than the "art." Physicians, however, are now feeling the force of competition and realizing that they must give their patients more -- real care instead of a mere bottle of pills. This enlightenment may cause physicians to make the effort to be more aware of their patients from a cognitive and behavioral perspective, which will benefit both patient and practitioner.

As the change in medical thought results in an emphasis on the effects of mental processes on illness and behavior, it becomes important to review significant, more detailed issues related to this change. The purpose of this thesis is to examine the patient-practitioner relationship from a psychological standpoint, focusing on patient perceptions and behaviors. In doing so, the social cognitive constructs such as illness representations and the concept of perceived control will be discussed.

Patient-Practitioner Communication

Faulty communication in the patient-practitioner relationship takes its toll on health (Taylor, 1986). Patients often judge the quality of care by the manner in which it is delivered, showing no knowledge or even concern about the actual technical quality of care (Ben-Sira, 1976; Ware, Davies-Avery, and Stewart, 1978). Poor patient-practitioner communication may result in depersonalization, noncompliance and even malpractice suits. The patient, while vulnerable, wants information and explanations for his or her illness and a method for recovery. On the other hand, the physician often wants the maximum use of time and efficiency. To the patient, this may indicate a lack of true listening by the doctor and contribute to an atmosphere of depersonalization, which, in turn, may have far reaching, negative effects on the patient's attitude about his or her recovery. As the role of psychology increases in health care, depersonalization becomes a serious concern and may not be merely a misconception on the patient's part. One medical consultant notes, ' "Middle-aged male physicians are unbelievably resistant to the idea that issues such as affinity and tone of voice are relevant to treatment. ...For people who spend their lives giving care to the distressed, it's amazing how little doctors understand of the basics of tenderness" ' (Easterbrook, 1987). Other practitioner behaviors such as using medical jargon or its

opposite, baby talk, may also serve to erode the relationship with the patient and the communication involved as the patient feels trapped in a helpless, poorly informed role. Along with the physician, the patient may contribute to faulty communication if he or she fails to listen carefully to the advice given. Also, patients often visit a professional with strong misconceptions about their condition and may ignore instructions they feel are irrelevant.

Negative patient perceptions caused by poor communication may result in less effective treatments. Patients do not use medical services and are less likely to go for check ups if extreme dissatisfaction is the result of health care encounters (Ware, Davies-Avery, & Stewart, 1978; Ross & Duff, 1982). More important, however, is the issue of patient noncompliance. It has been estimated that one-third of patients fail to follow the recommended treatment, but surprisingly, the main cause is said not to be personality traits, but faulty communication between physician and patient (Taylor. 1986).

Problems due to a damaging relationship can occur for the practitioner as well as the patient. Researchers are increasingly viewing medical malpractice suits as a way for the patient to get back at impersonal medical care (Halberstam, 1971).

Looking deeper into patient-practitioner interaction, it becomes apparent that the resulting problems are more complex than the overt behaviors of the patient. One factor that may

contribute to a serious lack of cooperation and communication is what I have termed a "circle of reinforcement." The physician sees difficulty in translating his technical information to a patient whom he sees as ignorant of the situation. The patient then reacts with confusion to the doctor, reinforcing the doctor's belief that the patient will never understand. As a result, physicians stop the attempt to explain the health problem, causing a breakdown in communication, patient dissatisfaction, and poor compliance (McKinlay 1975). It seems that the physician must influence his patient to make a committment to follow a specific medical regimen at a time when the patient is most vulnerable cognitively to external stimuli. When viewed in this way, the interaction and relationship between the patient and the practitioner becomes crucial.

The idea that patient satisfaction is tied closely with the manner in which treatment is given and often little else is not unique to our culture. Studies in Israel indicate this trend also (Ben-Sira 1976). Increasing problems in the complex relationship has brought about the term iatrogenesis to label the adverse conditions that occur in patients as a result of treatment by a physician. While focusing on the complexity of the patient-practitioner interaction, questions arise concerning the implications of the many subjective perceptions of the patient. Cognitively, he or she may asses the relationship with the doctor, causes of the illness, method of treatment, results of treatment, pain involved, dependence on the physician, and

even his or her ability to recover. In the context of health psychology, these perceptions can affect patient behavior and even affect health more directly through physiology.

When examining the patient-practitioner relationship and taking on a more patient-centered perspective in health care, it becomes necessary to examine the clinical situation from a more psychological standpoint. Existing theories of psychology can be applied to medicine, and more research has been done relating psychological constructs to medical practice and patient behavior. The broad scope of psychological research has been valuable in developing models which concentrate on more fundamental, theoretically derived attitudes and subjective perceptions of those in treatment. Especially applicable are studies in social psychology, which show scientists attempting to describe how people, as active agents, interpret, understand, and cope with illness threats while considering input from various sources of information.

Illness Representations

The significance of patients' common sense explanations of their illness has influenced Howard Leventhal and David R. Nerenz (1983) to develop a detailed model of illness representations and their role in coping with health threats. An overview of this model and related studies seem to indicate that perceptual

representations of illnesses may have a significant effect on coping behaviors and patient compliance to the prescribed medical regimen. Also, the model suggests that these representations are strongly influenced by symptoms perceived by the patient. The major concern of this model is to provide a psychological model connecting the individual to situations and describing his/her ongoing efforts at adaptation (Leventhal, Nerenz, 1983). This model begins with specific assumptions that emphasize an actively thinking patient involved in specific situations which evoke a series of cognitions and interpretations. First, the model assumes that behavior and experience are the result of an underlying information processing system that integrates current stimulus information with innate and aquired memories. The experiences and reactions created by this system operates on a moment by moment basis, changing with the situation. The second assumption involves developing a coping plan for the illness threat through the creation of an objective view of the illness as well as a coping plan for an affective response to the illness. A third assumption is that the processing system operates in stages, starting with a definition or representation of the problem. This steers the second stage of response plans for coping with the health problem. The third stage is one of appraisal to determine whether the coping response is effective in overcoming the problem. The fourth and final assumption is that the processing system operates on both concrete levels (symptoms) and abstract levels (labels for illnesses)

(Leventhal, Nerenz, Steele, 1984). Along with these assumptions, the authors of this model (1984) believe the major attributes of illness representation are identity, cause, consequences, and duration, which arise mainly from an interaction of bodily experience and past history with illness. In addition, they feel that social factors play a crucial part in the definition of illness. This model of illness representation appears to be the first of its kind in current literature, including many cognitive variables yet, at the same time, simplifying the major themes of the cognitive processing mechanism to allow application of the model to any interaction of the individual patient with a specific situation. It should be noted that the constructed illness representation may be inconsistent with trained medical thought due to any of the factors previously mentioned: history of past illness (or lack of), strong emotions, or social support for a faulty perception. If the illness representation does play a significant role in guiding coping strategies, it would seem that a key issue in health care would be to help the patient understand his or her problem and construct an accurate representation. First, however, the link between illness beliefs and behaviors must be demonstrated.

Several studies have been cited in support of the illness representation model. David Meyer (1981) conducted a series of studies with several groups of patients with hypertension, or high blood pressure, that clearly indicates the importance of perceived symptoms on illness beliefs and subsequent behaviors.

Of those studied, 80% agreed that hypertension is asymptomatic, but 88% of these individuals nevertheless reported that they could tell when their own blood pressure was elevated. More significant were the findings that although nearly all of the patients in treatment were very knowledgeable about their treatment, medication, and risks, only 35% reported taking their medication as prescribed. A substantial proportion of this noncompliance was traced to self-generated medication schedules dictated by symptom monitoring. It would appear, at least for those in active treatment, that many patients treat symptoms, not abstract disease labels (Leventhal, Nerenz, Steele, 1984). Other, more detailed studies on hypertensive patients have revealed similar data (Meyer, Leventhal, Gutmann, 1985). Another ongoing study (Leventhal, Nerenz, Steele,1984) conducted at the University of Wisconsin reported similar results by demonstrating that many diabetic patients use symptoms to monitor shifts in blood glucose levels rather than the precise, objective tests for urine or capillary blood glucose. These patients showed a high degree of confidence in the validity of symptoms.

If further data supports this aspect of illness representations and resulting behavior, it could have crucial implications for health care in a society where asymptomatic, "lifestyle" diseases are the leading causes of death. It seems that the physician should be the medical profession's central figure in restructuring individual patients' beliefs about their health problems. However, it seems that, as of yet, most of

these professionals have not provided this method of care. In fact, the opposite seems to be the case. David Steele (1982) tape recorded several treatment encounters between 250 hypertensive patients and their physicians in a longitudinal study over a 9-12 month period. The data suggest that health care providers may inadvertenty create and/or reinforce symptomatic representations that are discrepant with the biomedical model of hypertension. This may occur when the physician inquires about symptoms associated with the side effects of medication for hypertension but fails to make clear to the patient why he is asking. Also the practitioner may be concerned about the possibility of damage to other organs due to long-term blood pressure elevation and ask questions about particular symptoms (Leventhal, Nerenz, & Steele 1984). In this study, the tapes suggest that information sharing is more haphazard and informal than one might expect, and the patient is left with a great deal of latitude to invent causes, labels, consequences and time lines for specific complaints (Leventhal, Nerenz, Steel, 1984).

In addition to studies of hypertensive and diabetic patients, personal experience and comments from peers have reinforced the idea that faulty illness representations, often caused by a lack of effective communication with the physician, can result in noncompliance that inhibits efficient treatment. This is the case even with less serious, acute health problems. I have frequently visited a physician in order to obtain

antibiotics for a sore throat which resuts from sinus problems. Because the condition recurred many times, I continued for years to "save" part of my prescription for the next time I experienced pain. This behavior is clearly based on symptom perception -- I took medicine only until my throat stopped hurting. Finally, after years of following this procedure, I was informed that although the pain had been removed, the entire prescription must be taken to destroy remaining, infectious micro-organisms. When this line of action was taken, I had far fewer problems with recurring sore throats. This behavior seems to demonstrate the term "capricious compliance," (Lasagna, 1976) where a patient takes the prescribed medication but follows his or her own schedule, usually based on an irrational, self-made theory. It has been stated that the transmittal of factual information has little impact on compliance and may even increase the capriciousness with which patients use their medication. (Lasagna, 1976) However, it appears that this line of thinking does not take into consideration the information and communication that would directly combat faulty illness representations, focusing on the patient's perceptions, especially concerning symptoms and their meaning. In considering the patient's illness representation, the physician includes listening as a crucial step in communicating, and by attempting to understand the patient's perception, does much more than transmit factual information. It seems reasonable to assume that enhancing patient understanding of therapy and its effects by

altering faulty beliefs would be more likely to result in increased compliance.

Perceived Control

In addition to illness representations, the concept of control appears to play a crucial role in the successful treatment of patients. The psychology of control is concerned with the control of oneself and one's perceptions of reality (Janis, 1979) as well as an understanding of the causes of behavior and events (Hewstone, 1983). Looking closely at literature on control, one finds this concept divided into several types: behavioral control, cognitive control, informational control, and retrospective control. The majority of research in the area of health psychology focuses on cognitive control - the belief that one has a cognitive strategy that can affect the aversiveness of an event (Thompson, 1981) and informational control - the belief that information can engender feelings of control (Thompson, 1981). It is important to note that "the belief..." implies not actual control over the environment, but a perceived control.

In this section, the following areas will be reviewed: 1) studies on the elderly that illustrate the effects of perceived control on health, 2) perceived control's link with patient recovery through physiology, and 3) control's cognitive link to

illness representations through compliance behaviors and coping strategies.

The effects of a sense of control are illustrated clearly in studies on the elderly in nursing homes. In one study, (Langer & Abelson, 1972) the director of the home gave one group the opportunity to make decisions and gain a sense of personal reponsibility while, to the other group, he communicated an atmosphere of care and service but no sense of control. Despite the care provided for the second group, 71 percent were rated as having become more debilitated over a period of time as short as three weeks. In contrast, 93 percent of people who were encouraged to make decisions for themselves actually showed overall improvement. Based on their own judgements and those of the nurses who worked with them, they became more active and felt happier. There was also a judged improvement in their mental alertness and increased behavioral involvement in many different activities. In another study, (Langer & Rodin, 1976) more striking data were obtained in death rate differences between two treatment groups. Eighteen months before the study, the average death rate for the entire nursing home was 25 percent. In the subsequent 18 month period following intervention only 15 percent in the responsibility-induced group died, whereas 30 percent in the comparison group had died. Although other factors may have contributed to the difference, the study seems to indicate that a perceived sense of control is favorable. In addition to this research, other findings seem to imply that, given a sense of

personal responsibility and control over decisions, the elderly in nursing homes show considerable improvement in attitude and behavior.

Parallelling the studies on the elderly, the psychological control of patients has been researched in relation to medical treatment practices. Similar to the elderly who are in a "home" with regular schedules and limited freedom, the patient seems to be in a situation where his or her sense of control is undermined by an aversive physical condition in which both cause and solution are beyond control. Because the patient is almost forced to seek outside help, the impact of this help becomes an issue and has been termed by Brickman et al. (1982) as the "dilemma of helping." Although help is provided, it may further weaken the recipient's feeling of competence and sense of control. In addition,a sense of control has been shown to be especially important during stressful or aversive circumstances (Fiske & Taylor 1984), of which a period of illness is a good example.

Perceived control seems to have a physiological link with illness. The effects of loss of control in patients appear to be seen more clearly in the hospital setting where a more obvious, dramatic reduction of freedom exists. In hospitals several studies (Lorber, 1975, Taylor, 1979) resulted in the patients' exhibiting "reactance," (Brehm, 1966) a term referring to an angry reaction against a rather sudden, arbitrary withdrawl of freedom. This behavior of anger and hostility was often

accompanied by heightened physiological arousal, increased adrenalin and noradrenaline secretion, (Glass, 1977) and high levels of hydrocortisone (Katz et. al., 1970) which may have adverse effects on a number of medical conditions, increasing the likelihood of hypertension, tachycardia, or angina pectoris. In another study by Langer, Janis, and Wolfer, (1975) it was determined that perception of control over stress in hospital patients resulted in fewer requests for pain relievers and sedatives, and the patients were seen by nurses as showing less anxiety.

At the opposite end of the spectrum from reactance, the condition of "learned helplessness" (Seligman, 1975) can also result as patients lose a sense of control. A feeling of helplessness experienced by the patient may lead to depression which has physical consequences such as adrenalin depletion (Seligman,1975) that can be damaging to health. Work by Seligman (1975) has shown that his Attributional Style Questionaire, a questionaire designed to determine the style with which an individual explains the causes of events, can be used to correlate a pessimistic explanatory style with feelings of helplessness, depression, and loss of control. In addition, the following studies have shown that this explanatory style can play an important role in physical health.

In one study by Seligman (cited in Trotter, 1987) 69 women who underwent mastectomies for breast cancer were questioned. In a five-year followup, 75% of those judged to have a positive

explanatory style after the operation were still alive with no recurrance. Of the others with a poor explanatory style, only 35% were healthy. In another study by Seligman, Kamer, & Rodin (cited in Trotter, 1987) a pessimistic explanatory style was correlated with more suppressor cells being present in the body, which are thought to undermine the body's ability to fight tumor growth. Another study by Christopher Peterson (cited in Trotter, 1987) showed that explanatory style may be able to predict actual illness. Peterson measured the explanatory style of 172 undergraduates and then questioned them one month later about how many days they had been sick and one year later about how often they had been to the doctor. He found a strong correlation between helpless explanatory styles and subsequent illness. These studies show a connection between explanatory style, a strictly cognitive dimension, and physiology. A negative explanatory style seems to be linked with a sense of helplessness and loss of control.

At this point a contrast should be noted between studies of illness representatons, which focus on patient behaviors that affect health such as not following a prescribed regimen, and the studies on perceived control, in which control seems to affect health by some unknown link between cognition and physiology. Although both appear to have an important role in physical health, research in these two areas seems to focus on different endpoints. Studies on illness representation attempt to explain causes of noncompliance and patient behaviors which may have

significant effects on treatment success and health of the patient. On the other hand, studies on perceived control seem to look at a patient's percepton of the situation and its direct influence on physiology and illness. What the patient does is of little importance compared to how he or she thinks. Although the endpoint for perceived control studies is physiological, the link appears to be unclear and more research is necessary for a better understanding. Hence, the literature indicates that the concept of perceived control and models for illness representations affect health from different directions. In either case, however, the patient as an active perceiver seems to play a crucial part in his or her own health.

The psychology of control can also be viewed from another perspective - one that steps away from physiological effects, focusing more on behavioral compliance and relating to illness representations. Some researchers believe noncompliance is a patient's effort to reassert control over his or her situation (Hayes-Bautista, 1976). Because a patient has control over taking a prescription in the proper manner or following a specific treatment plan, it may initially seem that this would instill a feeling of control and of playing an active part in overcoming an illness, resulting in strict adherence to a recovery strategy. However, considering widespread noncompliance mentioned previously, this does not seem to be the case. Rather than wanting to control only behaviors related to a prescribed treatment, the patient's desire for control seems to extend even

to the relationship with the physician and the advice given. In wanting a greater sense of control, the patient may fail to comply to the prescribed medical regimen.

In addition to noncompliance, perceived control may be related to illness representations. Forming illness representations may be patients' effort at control as they attempt to channel the health problem into their own understandable terms by interpreting symptoms and using past experiences. Even if the representation is incorrect, the patient may be comforted by a belief that all is understood and, therefore, easily controlled.

If perceived control does play an important role in a patient's well-being, it would seem likely that an effective coping plan for the stressors of noxious medical examinations or treatments would add to a feeling of control. In several studies (Leventhal 1970; Leventhal, Meyer, Nerenz, 1980) it was shown that both a clear representation of the danger and a coping plan suggested by the physician were necessary for effective behavioral changes in patients. Either element alone was ineffective. If perceived control by the patient played a part in these experiments, having both correct information and a coping strategy seem to assist in a stronger feeling of control.

Once again, as with illness representations, the physicians relationship with the patient would appear to be important in the case of psychological control. In addition to providing accurate representations of illness, the physician is the patient's major

source of information concerning coping mechanisms and a plan for recovery. It must be remembered that physicians do not treat health problems alone, but rather patients, their illness representation, and their feelings of control. The relationship between psychological control and medicine is summarized best by Leventhal and Nerenz (1983) - "The patient needs to know how to turn over control to the practitioner, and the practitioner needs to know how to accept and again yield control with grace." (p. 32)

Summary

As the shift in medical thought toward a more patient-centered approach becomes an increasingly significant concern for health care professionals, the research literature reflects this trend and is becoming more abundant. It seems that the major link between the patient and his or her illness is the patient-physician relationship - a situation which has the potential to guide an untrained patient toward a better understanding of and a method of coping with an illness threat. However, for this complex relationship to be better understood and to result in improved compliance, the perceptions and information processing of the patient must be examined. This thesis reviews the empirical data that suggest, from different

perspectives, the importance of the medical patient as an active perceiver in successful health care. As health care providers continue to gain a better understanding of and appreciation for patient perceptions and behaviors, medicine will undoubtedly advance to an even more respected and successful profession in the eyes of all.

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